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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,772 07/17/2003 Wayne Patrick O'Brien 064749.0152 1688

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BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER

WEI, ZHENG

ART UNIT	PAPER NUMBER
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2192

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
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3 MONTHS 03/27/2007 ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/27/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mike.furr@bakerbotts.com
ptomail1@bakerbotts.com

Office Action Summary	Application No. 10/621,772	Applicant(s) O'BRIEN, WAYNE PATRICK	
	Examiner Zheng Wei	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/17/2003, 04/07/2004 and 06/07/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the application filed on 07/17/2003 and preliminary amendment filed on 04/07/2004, 06/07/2004.
2. Claims 1-54 are pending and have been examined.

Oath/Declaration

3. The Office acknowledges receipt of a properly signed oath/declaration filed on July 17, 2003.

Priority

4. The priority date considered for this application is July 17, 2003.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 6, 12, 18, 35-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. The term "common modeling language" in claims 6, 12, 18, 35-54 is a relative term which renders the claim indefinite. The term "common modeling language" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be

reasonably apprised of the scope of the invention. For the purpose of compact prosecution, the Examiner treats "common modeling language" as any programming language that can be used to describe or implement models. For example, Modeler's language.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 7-12, 29-32 and 47-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 7, 29 and 47: These claims claim the logic embodied in a medium, wherein the logic can be broadly interpreted as computer program listings per se which is embodied in the medium and said medium could be any type of mediums including Electro-Magnetic Signals. The logic/computer program claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer that permit the computer program's functionality to be realized. Therefore, the logic

claimed as computer program listings per se are nonstatutory. See M.P.E.P. 2106.01 (I).

The Electro-Magnetic Signals as a form of energy, is not a tangible physical article or object and it does not fall within either of the two definitions of manufacture. Therefore the medium claimed as the type of Electro-Magnetic Signals is also nonstatutory. See interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility, Annex IV (c), (Signed 26Oct2005) –OG Cite: 1300 OG 142.

<<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>>

Claims 8-12, 30-32 and 48-52: These claims, which depend from claims 7, 29 and 47 respectively, do not remedy the deficiencies as noted above, thus are also rejected under 35 U.S.C. 101 for the same reasons.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Garloff (Garloff et al., US 5,699,310).

Claim 1:

Garloff discloses a method, a system and procedure logic for designing a computer program, comprising:

- accessing a plurality of domain rules, each domain rule (GENERATION KNOWLEDGE BASE) being invariant (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASES INCLUDE: GENERATION RULES" and related text; also see Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text)
- displaying a plurality of business rules, each business rule (DESIGN KNOWLEDGE BASES and SPECIFICATIONS KNOWLEDGE BASE) being variable (see for example, Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text);
- selecting one or more business rules of the plurality of business rules in response to a user selection (see for example, Fig.2, "CHANGE KBASE" and Fig.3 and related text at col.9, lines 25-31);
- customizing the one or more business rules (see for example, Fig.3, "CHANGE A KBASE" and related text);
- associating the one or more business rules with a procedure (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES",

"SPECIFICATIONS KNOWLEDGE BASE", "INHERITANCE ENGINE" and related text);

- associating the domain rules with the procedure (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text);
- displaying a model representing the procedure (see for example, Fig.1A "FULLY INHERITED VIEW OF OBJECTS" and related text); and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.1A, "GENERATION PROCESS", "SOURCE CODE" and related text).

Claim 2:

Garloff further discloses the method of claim 1, further comprising:

- collecting the domain rules and the business rules (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "GENERATION KNOWLEDGE BASES", "INHERITANCE ENGINE" and related text);
- allocating the domain rules and the business rules to a plurality of use cases;
- realizing the use cases (see for example, Fig.7A and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.2, "CHECK SPECIFICATIONS", Fig.6 and

related text).

Claim 3:

Garloff also discloses the method of claim 1, further comprising:

- checking a syntax of the code (see for example, Fig.6 and related text, also see col.9, line 66- col.10, line 2, "reviewing Methods for proper syntax"); and
- providing a notification if a syntax error is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 4:

Garloff further discloses the method of claim 1, further comprising:

- checking a logical consistency of the code (see for example, Fig.6, "CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS" and related text); and
- providing a notification if a logical inconsistency is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 5:

Garloff also discloses the method of claim 1, further comprising:

- checking a compatibility between the model and the code (see for example, Fig.6, "CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS" and related text); and

- providing a notification if an inconsistency is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 6:

Garloff further discloses the method of claim 1, wherein the model is expressed according to a common modeling language (see for example, col.5, lines 47-53, "Modeler's language").

Claims 7-12:

Claims 7-12 are a logic (procedure/method) version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claims 7-12.

Claims 13-19:

Claims 13-19 are system version for performing the claimed method as in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, Garloff's teachings also anticipate claims 13-19.

Claim 20:

Claim 20 is another method version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claim 20.

Claim 21:

Garloff discloses a method for managing rules for designing a computer program, comprising:

- accessing a plurality of rules (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "GENERATION KNOWLEDGE BASES", "INHERITANCE ENGINE" and related text);
- analyzing the rules to separate a plurality of domain rules from a plurality of business rules, each domain rule being invariant, each business rule being variable (see for example, Fig.1B, "INHERITANCE ENGINE" and related text, also see Fig.3, "DISPLAY LIST OF KBASES" and related text);
- storing the business rules (see for example, Fig.3, "CLOSE/OPEN ALL KBASES" and related text); and
- providing a business rule from the stored business rules in response to a request for the business rule (see for example, Fig.3, "DISPLAY LIST OF KBASES" and related text).

Claim 22:

Garloff further discloses the method of claim 21, further comprising:

- customizing the provided business rule (see for example, Fig.3, "CHANGE A KBASE" and related text);
- associating the customized business rule with a procedure (see for example, Fig.4, "CREATE FULLY INHERITED VIEW OF OBJECT" and related text);
and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.2, "GENERATE", Fig.1C, "GENERATION PROCESS", Fig.7A and related text)

Claim 23:

Garloff also discloses the method of claim 21, further comprising:

- associating the domain rules with a procedure (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text); and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.2, "GENERATE", Fig.1C, "GENERATION PROCESS", Fig.7A and related text).

Claim 24:

Garloff further discloses the method of claim 21, further comprising:

Art Unit: 2192

- allocating the domain rules and the business rules to a plurality of use cases (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text; also see Fig.7A and related text);
- realizing the use cases (see for example, Fig.7A, "WRITE SOURCE MODULES TO DISK FILES" and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.6 and related text for checking).

Claims 25-28 and 33:

Claims 25-28 and 33 are system version for performing the claimed method as in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, Garloff's teachings also anticipate claims 25-28 and 33.

Claims 29-32:

Claims 29-32 are a logic (procedure/method) version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claims 29-32.

Claim 34:

Claim 20 is another method version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claim 34.

12. Claims 35-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Little (Little et al., US 2002/0091990).

Claim 35:

Little discloses a method for initiating display of a view of a computer program design, comprising:

- accessing a plurality of artifacts of a computer program design, each artifact of the plurality of artifacts expressed using a common modeling language (see for example, Fig.3, Fig.4 and related text, also see p.6, paragraph [0127], UML);
- receiving a selection of a first view from a plurality of views, each view of the plurality of views associated with a display of a subset of the plurality of artifacts (see for example, Fig.11 Logical View and related text);
- organizing a first subset of artifacts for display according to the first view, the first subset comprising a particular artifact (see for example, Fig.16, Fig.17 and related text);
- initiating display of the first subset of artifacts according to the first view (see for example, Fig.16-17 and related text);

- receiving a selection of a second view from the plurality of views (see for example, Fig.12, Component View and related text);
- organizing a second subset of artifacts for display according to the second view, the second subset comprising the particular artifact (see for example, Fig.12, right side panel and related text); and
- initiating display of the second subset of artifacts according to the second view (see for example, Fig.12, right side panel and related text).

Claim 36:

Little further discloses the method of claim 35, wherein an artifact of the plurality of artifacts comprises a requirement of the computer program design (see for example, p.6, paragraph [0113], logical view, logical package).

Claim 37:

Little also discloses the method of claim 35, wherein:

- receiving the selection of the first view further comprises receiving a selection of a high-level artifact view (see for example, fig.16-17, left panel, User Cases View, high lighted "Main" and related text); and
- organizing the first subset of artifacts further comprises organizing a plurality of high-level artifacts of the plurality of artifacts according to the high-level artifact view (see for example, fig.16-17 and related text).

Claim 38:

Little further discloses the method of claim 35, wherein:

- the first view comprises a high-level artifact view, the high-level artifact view comprising a structural view (see for example, Fig.16, fig.17 and related text); and
- the second view comprises the structural view (see for example, Fig.12, Component View and related text).

Claim 39:

Little further disclose the method of claim 35, wherein:

- the first view comprises a high-level artifact view, the high-level artifact view comprising a behavioral view (see for example, Fig.20, and related text); and
- the second view comprises the behavioral view (see for example, Fig.22 and related text).

Claim 40:

Little also discloses the method of claim 35, wherein:

- the first view comprises a structural view, the structural view comprising an active class (see for example, Fig.17 and related text, also see p.10, paragraphs [0187]-[0192]); and
- the second view comprises a behavioral view, the behavioral view comprising the active class (see for example, Fig.22 and related text, also see p.11,

paragraph [0208]).

Claims 41-46 and 53:

Claims 41-46 and 53 are system version for performing the claimed method as in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, p.17, right side column, line 65 – p.19, right side column, line17). Therefore, Little's teachings also anticipate claims 41-46 and 53.

Claims 47-52:

Claims 47-52 are a logic (procedure/method) version for performing the claimed method in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Little's teachings also anticipate claims 47-52.

Claim 54:

Claim 54 is another method version for performing the claimed method in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Little's teachings also anticipate claim 54.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Coad et al. (US 6,851,105) discloses a method and systems for generating, applying and defining patterns for software development. The software development tool receives an indication of a pattern, generates software code reflecting the pattern.
 - Coad et al. (US 6,851,107) discloses Methods and systems provide an improved software development tool which allows a developer to simultaneously view a graphical and a textual display of source code. The graphical and textual views are synchronized so that a modification in one view is automatically reflected in the other view.
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-02059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

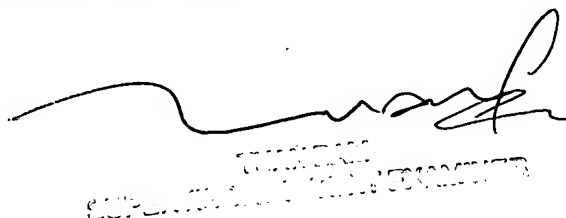
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW

A handwritten signature in black ink, appearing to be "Mark", is written over a faint, rectangular stamp. The stamp contains text that is mostly illegible but appears to include "RECEIVED" and "EBC".